

Memorandum



To : SAC, BOSTON (264C-NEW)

Date 2/11/92

From : SSA [redacted] (C-5)

b6
b7C

Subject: UNSUBS(S);
PLACEMENT OF MICHELANGELO
VIRUS ON LEADING EDGE
COMPUTERS;
CFA;
OO: BOSTON

On 2/1/92, I spoke with [redacted] LEADING EDGE
COMPUTER CORPORATION, telephone number (508) 836-4800 regarding
this matter. [redacted] indicated that about 500 microcomputers had
been infested at the LEADING EDGE facility in Compton,
California, prior to shipping for retail sale throughout the
United States.

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On 2/7/92, SSA [redacted]
[redacted] Economic Crimes Unit, FBIHQ, indicated that this
matter should be opened, with Boston as Office of Origin.

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Please coordinate interview of [redacted] with AUSA [redacted]
[redacted] who holds an MS in Computer Science and will handle CF&A
cases for USA, Boston.

JTR/mjm
(2) *mjm*

O/A
2/11/92
JP

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264C-BS-62095-1

SEARCHED	INDEXED
SERIALIZED	FILED
FEB 1 - 1992	
FBI - BOSTON	

JP

FILE: BS-0062095 (264C)

1A NO | DESCRIPTION

0001 | ORIGINAL NOTES

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1A-1
62095-
Universal File Case Number 264C-BS-

Field Office Acquiring Evidence _____

Serial # of Originating Document _____

Date Received _____

From _____

(Name of Contributor)

(Address of Contributor)

(City and State)

By _____

(Name of Special Agent)

To Be Returned ☐ Yes ☒ No

Receipt Given ☐ Yes ☒ No

Grand Jury Material - Disseminate Only Pursuant
to Rule 6 (e), Federal Rules of Criminal Procedure

☐ Yes ☒ No

Title:

Reference: _____

(Communication Enclosing Material)

Description: ☒ Original notes re interview of

_____ _____

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transmit virus - one state to another -

E-Mail message - one state to another -

Gov't computer -

[Redacted]

XENIX -

b6
b7C

[Redacted]

- Mike [Redacted]

① *

[Redacted]

best English

~~2nd~~ 2nd ST

POMONA
CALIF.

714-629-8050

- Qual. Ctr. -

rumor that Compu trend -

[Redacted]

Assoc. - Calif. b6
b7C

others have who had ~~had~~ Michael

1900 WYATT DR.
S. 8

Santa Clara, Calif -
408 - 988 - 3832

Virus Prot: products -

Wom [Redacted]

← →

[Redacted]

↔

Virus Info. DATA BASE
Santa Clara, Calif.

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b7C

[Redacted]

will know her address -

1st to detect virus in April. 91

Box -
Shipping records

(2)

LDI - CV.

Future Shop -
Vancouver

1/7/92 -

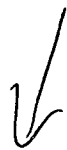
Rept. from customer
LDI, Customer -

one of their NT technicians found virus
in computer →

that had been shipped
from Leading Edge

Compton.
150 Carob St.
COMPTON -

b6
b7C



Sent S/O to confirm
virus & clean other
computers in that S/M. -

Checked all systems in
Calif as to when started -
Found more systems had been
infected

12/7 - 12/21/91

→ In Inventory - systems
determined

(3)

ONLY SAW Virus on
2 ee NIX disquettes — that
were recd. from
OUTSIDE source ⇔

[] — Lding Edge b6
b7C

went through all disquettes —

3 discs — 1 box

3 discs — another
BOX —

Looked into

2 ee NIX HAD NO INTERNAL
Control System —

2. List of how MANY
quantities sent + date —

3 Mailed to [] —

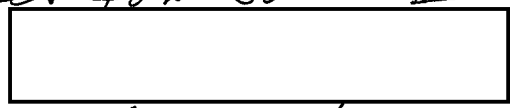
3 being held there. — b6
b7C

[] Checked discs — for virus —
ONE sent back to
2 ee NIX —
2 Cleaned + destroyed — BS.

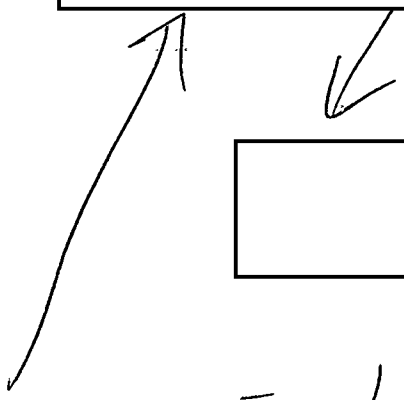
TAKE all 3 —

500 - 5000 →

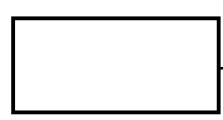
Automated Sources



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Start w him -

 - discs -

Monday - back

U.S.S.S. - case opened -

~~X~~



U.S. Department of Justice

Federal Bureau of Investigation

Office of the Director

Washington, D.C. 20535

FBI Press Office
(202) 324-3691

Media Release
March 4, 1992

**STATEMENT BY FBI DIRECTOR SESSIONS CONCERNING
WHITE-COLLAR CRIME FRAUD ALERT ON COMPUTER VIRUSES**

FBI Director William S. Sessions made the following statement today regarding computer viruses and their potential impact on computer users.

"A computer virus is a program that attaches itself to other programs and has the ability to replicate itself. Typically hidden, a virus can damage or destroy information stored in a computer. Presently, there are over 1,000 known computer virus strains in existence with new strains surfacing daily.

Recent publicity regarding the 'Michelangelo Virus' has heightened the public's awareness of the existence of computer viruses and the potential damage they can cause. Viruses can exist in new commercial computer hardware, legitimate commercial software, and computer programs obtained by other means, such as electronic bulletin boards and disk swapping. The FBI urges computer operators to use appropriate security procedures to minimize the risk of a computer virus destroying information. Security procedures should include, at a minimum, routinely backing up sensitive or necessary data on a regular basis and, if possible, regularly scanning computer terminals for viruses using updated virus detecting software. If you detect a virus, consult a computer expert to obtain guidance on removing the virus from the infected equipment.

The FBI investigates violations of a number of Federal statutes which can apply, if computerized data is intentionally altered, stolen or destroyed on networks, in financial institutions, or in government computers. If you possess information indicating that Federal statutes concerning computer fraud and abuse may have been violated, please call your local FBI field office."

264C-B5-62095 - 2

SEARCHED	INDEXED
SERIALIZED	FILED
MAR 06 1992	
FBI - BOSTON	

(Indicate page, name of
newspaper, city and state.)

(Mount Clipping in Space Below)

Date: 2/18/92
Edition: BOSTON GLOBE
Business Sec., pg 1

Title: Placement of
Michigan virus
on leading edge

Character: CFA
or

Classification:

Submitting Office: BOSTON

Indexing:

264C-BS-0062095

SEARCHED	INDEXED
SERIALIZED	FILED
MAR 3 - 1992	
FBI - BOSTON	

264C-BS-62095-3



REUTERS PHOTO

*mpreau, the quintessential '80s man who tried to build a
of debt, emerged from hiding yesterday to watch
y his dream. Shareholders and creditors approved a
ed-down property developer, Camdev Corp.*

'We don't know if they can be saved.'

CRAIG CONRAD, *Leading Edge Products*

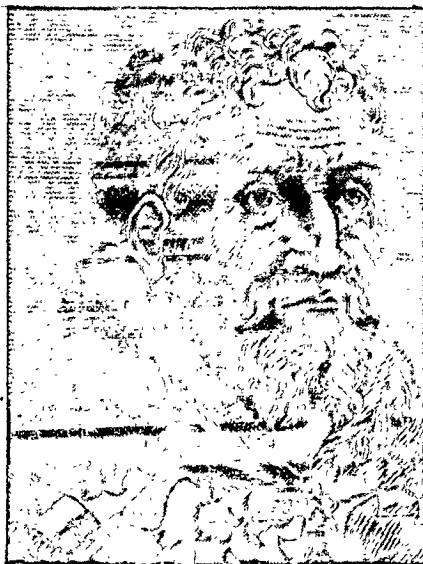
Leading Edge attacked by rogue virus

By Josh Hyatt
GLOBE STAFF

Up until now, depending on your frame of reference, Michelangelo is either a famous artist or a member of the Ninja Turtles. As of today, though, he may become better known as a deadly computer virus.

Leading Edge Products Inc., a Westborough computer maker, yesterday acknowledged that it had shipped 500 computers infected with the so-called "Michelangelo" virus, a rogue program that will destroy any files it encounters on March 6, the painter and sculptor's birthday.

So far, the company says, it has reached about 80 percent of consumers who bought personal computers over the two-week span in December during which the virus was spread. For that



MICHELANGELO
Can a virus be artful?

group, the company can supply a simple software antidote that halts the infection dead in its tracks.

For those who don't get the antidote in time, though, there isn't much hope. "We don't know if they can be

VIRUS, Page 66

Who qualifies?

If the bill becomes law, people who are currently receiving extended jobless benefits or who will begin receiving those benefits between the bill's enactment and June 13 will be eligible for an additional 13 weeks of benefits.

People in high-unemployment states such as Massachusetts would thus be eligible for a total of 59 weeks of benefits: 26 weeks from the regular program, 20 additional weeks from the extension signed into law just before Thanksgiving and an additional 13 weeks from the new extension.

Fidelity funds lose another top executive

By Kimberly Blanton
GLOBE STAFF

A top-level Fidelity Investments executive and a driving force in the firm's explosive growth is resigning to join Credit Suisse First Boston, an international investment bank.

John J. Cook Jr. will become chairman of First Boston Asset Management and Credit Suisse First Boston Investment Management. The Boston firms are investment management units of Credit Suisse First Boston, based in New York.

Cook's resignation as president of Fidelity Investments Institutional Group,

FIDELITY, Page 66

Consumer confidence

Seasonally adjusted index of
consumer expectations about
economy's future

1035=100

103

120

Index at 50.4

Computer virus attacks Leading Edge

■ VIRUS

Continued from Page 65

saved," admitted Craig Conrad, a company spokesman. Conrad further vowed to "find out how the virus got into our building."

But industry specialists gave the company long odds on actually pinpointing the mean-spirited programmer who planted it. "No virus writer has ever been collared to date," noted John McAfee, president of a firm that specializes in detecting and removing computer viruses. "It's a nearly impossible task. It's like trying to trace the origins of the common cold."

This virus doesn't quite go back as far. But McAfee's own research reveals that Michelangelo was first identified last March, and that it originated either in Sweden or The Netherlands. He says it is one of 1,100 or so viruses to which computers are now susceptible.

As with a biological virus, a computer virus is a self-replicating code that infects everything it touches. Typically, it spreads from one computer to another through the transfer of infected floppy diskettes.

While each virus reflects the quirky agenda of its author, they almost always do damage. Late last

year, Novell Inc., a leading maker of networking equipment, discovered it had shipped products infected with a virus called "Stoned." Before destroying files, that virus filled computer screens with a demand for the legalization of marijuana.

In having a virus named after him, Michelangelo joins such former honorees as Father Christmas, Darth Vader, Frere Jacques and — of course — Saddam.

Conrad said that Leading Edge notified dealers of the virus shortly after one of the company's distributors discovered it by accident in mid-December. That reseller was routinely scanning the equipment with software that pinpoints viruses. After finding the Michelangelo code, the customer contacted the company's service department.

Leading Edge then set about identifying the serial numbers of machines that were sold with similar software attached. Conrad says the company determined that up to 500 computers could be infected, and that the virus originated in equipment that was provided by a subcontractor to its assembly plant in Compton, Calif. Beyond that, Conrad said, "we can't get into too much detail."

The company notified dealers with a Jan. 10 letter, sending them diskettes that consumers can use to detect and remove the virus within two minutes. "They handled it professionally," said Gordon Hoffstein, president of PC's Compleat, a computer reseller in Marlborough.

But not everyone praises the company's behavior. "It's astonishing that the internal quality control of some of the companies on which we rely is as loose as this," declared Richard tenEyck, who serves on the board of the Boston Computer Society. "Their internal controls should be reviewed."

Indeed, Conrad said the company will now take extra precautions, and may even begin bundling an antidote program with its computers. He pointed out that Michelangelo only infected 10 percent of the computers Leading Edge shipped in December.

But viruses of all kinds are on the upswing, one distributor said. "With the proliferation of modems and networks and all kinds of shared software, I'm suddenly seeing them," said Peter Tedeschi, president of Computer Concepts, a retail outlet in Hanover. "Until last year, I had never encountered one."

dom, and also race trying to expand."

"The world is Cook. "If we're ab class investor and firm] the size of the worldwide and dom mous."

From his Boston oversee investing here and overseas, the Far East. He w Hennessy, chairman First Boston.

Cook said he's "on the best of te happy up until my igation is effectiv week.

Fidelity said th mediately to repl ported to J. Gar dent of Fidelity I search Co. The fir who were under port to Burkhe (Ned) Johnson, said Paula Slotk

House OK's \$ jobless

■ JOBLESS

Continued from

After four m congressional D the recession eat ularity, he finally sure. Unlike the the extra bene some tax collecti er changes.

This year proposed payir coverage by ha emergency, whi ernment borrow

Bush balke plaining that it deficits that ar cords.

Pension pair face fraud, larceny charges

■ QUIRK

Continued from Page 65

amount of state and federal taxes withheld, while overreporting her own state and federal withholdings by the same amount, Harshbarger said.

The scheme, which involved false W-2s issued to nine employees in one year, and three in another, netted Quirk \$6,500, according to state officials.

raigned Feb. 13 at Suffolk Superior Court.

While Harshbarger spokesman Tom Samoluk said the charges resulted from an audit of the investment board last spring, Cooley said the investigation was prompted by vindictive board members.

"This was an operation run by the PRIM board to try to destroy [the Quirks], not because they are corrupt, but because they resisted

\$3 billion in public employee pension money.

At the time of his ouster, Quirk was under fire for accepting \$25,000 in cash and stock options from takeover specialist Carl Icahn to help mount a campaign against a company that Icahn wanted to acquire.

He also angered former Gov. Dukakis by ringing up hefty travel expenses at a time when the rest of the administration was taking across-

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FEDERAL BUREAU OF INVESTIGATION

Date of transcription 3/12/92

[redacted] Product Development, LEADING EDGE PRODUCTS, INCORPORATED (LE), Westborough, Massachusetts, was interviewed with the assistance of [redacted] Assistant United States Attorney, District of Massachusetts. [redacted] furnished the following information:

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On January 7, 1992, one of LE's customers, L.D.I., located in Cleveland, Ohio, reported to [redacted] that the Michel-Angelo virus had been detected in a computer shipped directly from LE, 150 Carob Street, Compton, California.

Subsequent investigation by LE in Compton, California, discovered three diskettes in one box, and three diskettes in another, all infected with the Michel Agelo virus and awaiting shipment from the LE, Compton warehouse. The diskettes were received between December 7-21, 1991, from ZENIX, Erie Street, Ramona, California. Three of the diskettes were forwarded to [redacted] in Massachusetts. Two of the diskettes were cleaned and destroyed in the LE, Westborough, Massachusetts facility. One diskette was sent back to ZENIX. [redacted] LE, Compton, California, discovered the six infected diskettes and retained three under lock and key. Three diskettes were shipped to LE, in Massachusetts.

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Investigation on 3/4/92 at Westborough, Massachusetts File # 264C-BS-62095 -4
by SA ROBERT A. KEANE/cs Date dictated 3/5/92

FBI

TRANSMIT VIA:

☒ Teletype
☐ Facsimile
☐ _____

PRECEDENCE

☐ Immediate
☒ Priority
☐ Routine

CLASSIFICATION:

☐ TOP SECRET
☐ SECRET
☐ CONFIDENTIAL
☐ UNCLAS E F T O
☒ UNCLAS

Date

3/5/92

FM FBI BOSTON (264C-62095)

TO FBI LOS ANGELES/PRIORITY/

BT

UNCLAS

CITE: //3090//

SUBJECT: UNSUB(S); PLACEMENT OF MICHELANGELO VIRUS ON LEADING
 EDGE (LE) COMPUTERS; CFA; OO: BOSTON.

ON 3/4/92, CONTACT WAS MADE WITH [REDACTED]
 PRODUCT DEVELOPMENT, LE PRODUCTS, INC., WESTBOROUGH, MA. [REDACTED]

ADVISED A CLEVELAND, OHIO, LE CUSTOMER DISCOVERED ON 1/7/92 THE
 MICHELANGELO VIRUS IN A PRODUCT RECEIVED DIRECTLY FROM LE,
 COMPTON, CA.

SUBSEQUENT INVESTIGATION BY LE IN COMPTON, CA, DISCOVERED
 THREE DISKETTES IN ONE BOX AND THREE DISKETTES IN ANOTHER. ALL
 WERE INFECTED WITH THE MICHELANGELO VIRUS AND AWAITING SHIPMENT

21 11XMD001W, 065

Approved: _____

Transmitted _____

(Number)

(Time)

Per _____

disk
 njm CS

264C-62095-5

SEARCHED	INDEXED
SERIALIZED	FILED
APR 01 1992	

Keane JAK

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FBI

TRANSMIT VIA:

- ☐ Teletype
☐ Facsimile
☐ _____

PRECEDENCE:

- ☐ Immediate
☐ Priority
☐ Routine

CLASSIFICATION:

- ☐ TOP SECRET
☐ SECRET
☐ CONFIDENTIAL
☐ UNCLAS E F T O
☐ UNCLAS

Date: _____

FROM THE COMPTON WAREHOUSE. LE DETERMINED THE DISKETTES WERE
 RECEIVED BETWEEN 12/7-21/91 FROM XENIX, ERIE STREET, POMONA, CA,
 TELEPHONE NUMBER (714) 629-8050. THREE DISKETTES WERE FORWARDED
 TO [REDACTED] IN MASSACHUSETTS. TWO OF THESE WERE CLEANED AND
 DESTROYED IN THE MASSACHUSETTS FACILITY. ONE WAS SENT BACK TO
 XENIX. [REDACTED] LE, COMPTON, CA, DISCOVERED THE SIX INFECTED
 DISKS AND HAS RETAINED THE REMAINING THREE DISKETTES UNDER LOCK
 AND KEY IN HIS DESK IN CA. [REDACTED] WILL BE AVAILABLE 3/9/92.

AUSA [REDACTED] DISTRICT OF MASSACHUSETTS, ADVISED HE
 WOULD ENTERTAIN PROSECUTION SHOULD VENUE AND VIOLATION OF CFA
 STATUTE BE ESTABLISHED.

LEADS:

LA AT COMPTON, CA:

CONTACT [REDACTED] 150 CAROB STREET, COMPTON, CA, AND OBTAIN
 THE THREE DISKETTES CONTAINING THE MICHELANGELO VIRUS AND
 FORWARD TO BOSTON DIVISION. IT IS NOTED LE IS SUBSIDIARY OF
 AUTOMATION SOURCES AS LOCATED AT SAME ADDRESS, AND PRIOR TO
 CONTACT WITH [REDACTED] IT IS RECOMMENDED THAT [REDACTED]
 AS FIRST BE CONTACTED.

LA AT POMONA, CA:

Approved: _____

Transmitted _____

(Number)

(Time)

Per _____

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b7C

b6

b7C

FBI

TRANSMIT VIA:

- ☐ Teletype
☐ Facsimile
☐ _____

PRECEDENCE:

- ☐ Immediate
☐ Priority
☐ Routine

CLASSIFICATION:

- ☐ ~~TOP SECRET~~
☐ ~~SECRET~~
☐ ~~CONFIDENTIAL~~
☐ UNCLAS E F T O
☐ UNCLAS

Date: _____

1 CONTACT [REDACTED] MARKETING, XENIX, ERIE STREET,
 2 POMONA, CA, TELEPHONE (714) 629-8050 AND DETERMINE WHERE AND WHEN
 3 MICHELANGELO VIRUS DETERMINED BY XENIX.

BT

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Approved: _____

Transmitted _____

(Number)

(Time)

Per _____

b6
b7c

Memorandum



To : SAC, BOSTON (264C-BS-62095) (C)

Date 4/9/92

From : SA ROBERT A. KEANE (C-5)

Subject: UNSUBS;
PLACEMENT OF MICHELANGELO VIRUS
ON LEADING EDGE COMPUTERS;
CFA;
OO:BOSTON

Re FD-302 with [redacted] 3/4/92, at Westborough, Massachusetts.

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Investigation in this matter was initiated with the report of a local Westborough, Massachusetts company that indicated the company shipped 500 computers infected with the "MICHELANGELO" virus.

Contact was made with AUSA [redacted] District of Massachusetts, who advised he would entertain Federal prosecution should Federal jurisdiction and venue be established in the State of Massachusetts.

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b7C

Investigation at LEADING EDGE computer company, Westborough, Massachusetts, revealed no evidence of a Federal violation.

This matter was kept pending throughout March 1992, in the event a report indicating a violation of a Federal statute occurred, particularly over 3/6/92, the anniversary of MICHELANGELO's birthday. Apparently, the extensive publicity given by the media stimulated individuals and companies to institute safeguards to prevent damage by the "MICHELANGELO" virus, ~~as~~ damage was not as extensive as originally anticipated.

To date, there has been no report of computer abuse meeting Federal statutory requirements, and it is recommended this matter receive no further investigation and be closed administratively.

1-Boston
RAK:lrr

close-4
RP

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264C-BS-62095-6

SEARCHED	INDEXED
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APR - 0 1992	
FBI - BOSTON	